NHD Project Backround

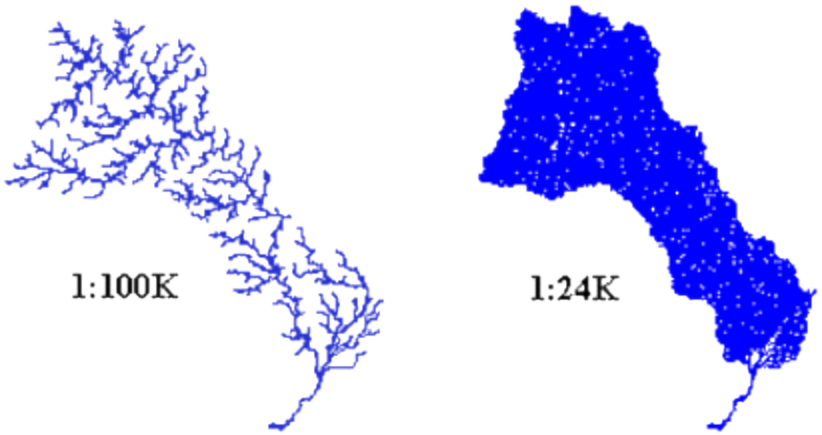
The National Hydrography Dataset Project (NHD) is the culmination of recent cooperative efforts between the USGS, EPA, and state cooperators such as MoRAP to create a comprehensive and standardized coverage of hydrologic data for the entire United States. As part of the NHD, separate digital stream network files are developed for each 8-digit Hydrologic Unit (referred to as Catalog Units or CUs). For much of the country this dataset has been completed at the 1:100,000 scale. The current focus of the program is to create these digital stream networks at the 1:24,000 scale by working with individual states and contractors.

For more information on the national program, visit http://nhd.usgs.gov.

In 1999 MoRAP entered into a work-share agreement with the US Geological Survey (USGS) to complete the high resolution (1:24,000 Scale) NHD for Missouri. USGS provides MoRAP with digital stream linework (digital line graphs, DLGs, and tagged vector hydros, TVHs) and the necessary programs to complete the NHD. In addition to this linework, the US Forest Service has provided their cartographic feature files (CFFs) to help complete digital linework coverage for the state.

Why is the 1:24,000 scale data so important?

1. As much as 40% of streams are not depicted at 1:100,000
2. 1:24,000 more accurately depicts the true complexity of stream networks

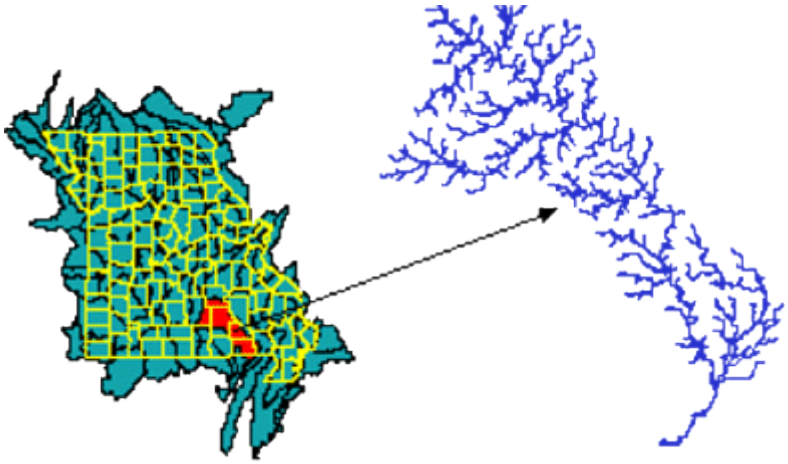


Current River Basin, Missouri

What is a Digital Stream Network?

A digital stream network is a model of a “real-world” stream network. These digital representations provide an entirely new, but more importantly a more holistic perspective of our stream resources. Architects and engineers rely heavily on digital representations to better assess and design their products or projects. Only recently, however, have natural resource professionals widely discovered the true benefits of such digital representations for assessment and planning.

Digital representations provide entirely new and more holistic perspectives



The digital stream networks we are producing for the 1:24,000 NHD are digital representations of the streams found on USGS 7.5' topographic maps. What makes the NHD so useful is that its files are seamless. This allows the user to view and work with an entire watershed (CU) as a single unit instead of having to find a room large enough to piece together 50 or more topographic maps.

NHD files represent the streams on 7.5' topographic maps